FIG. 1

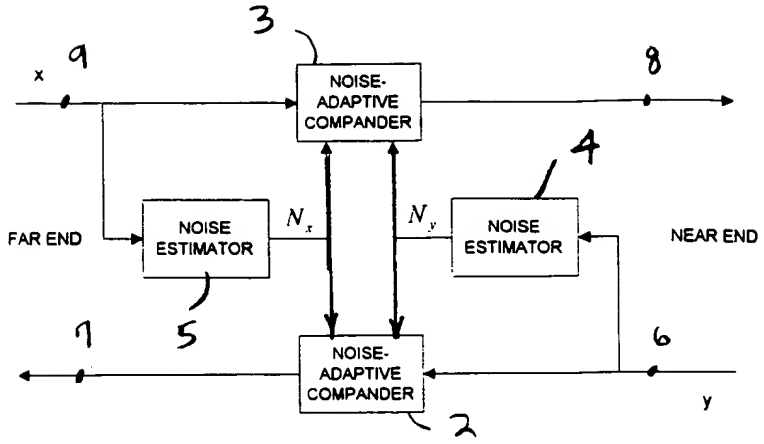
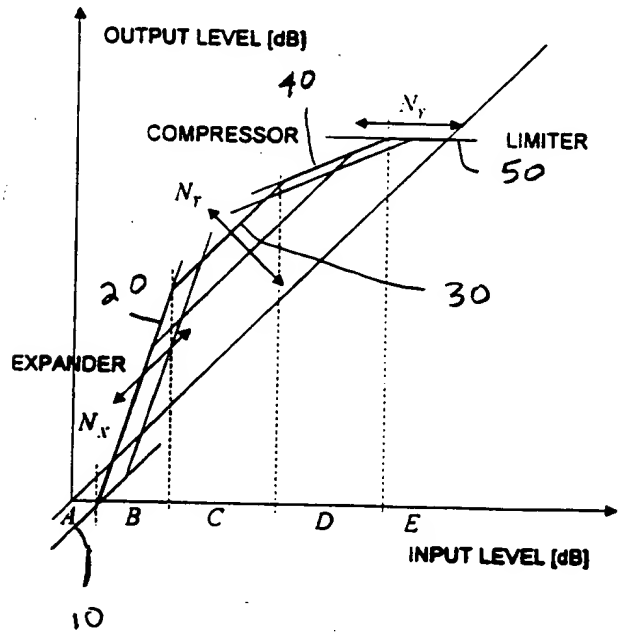
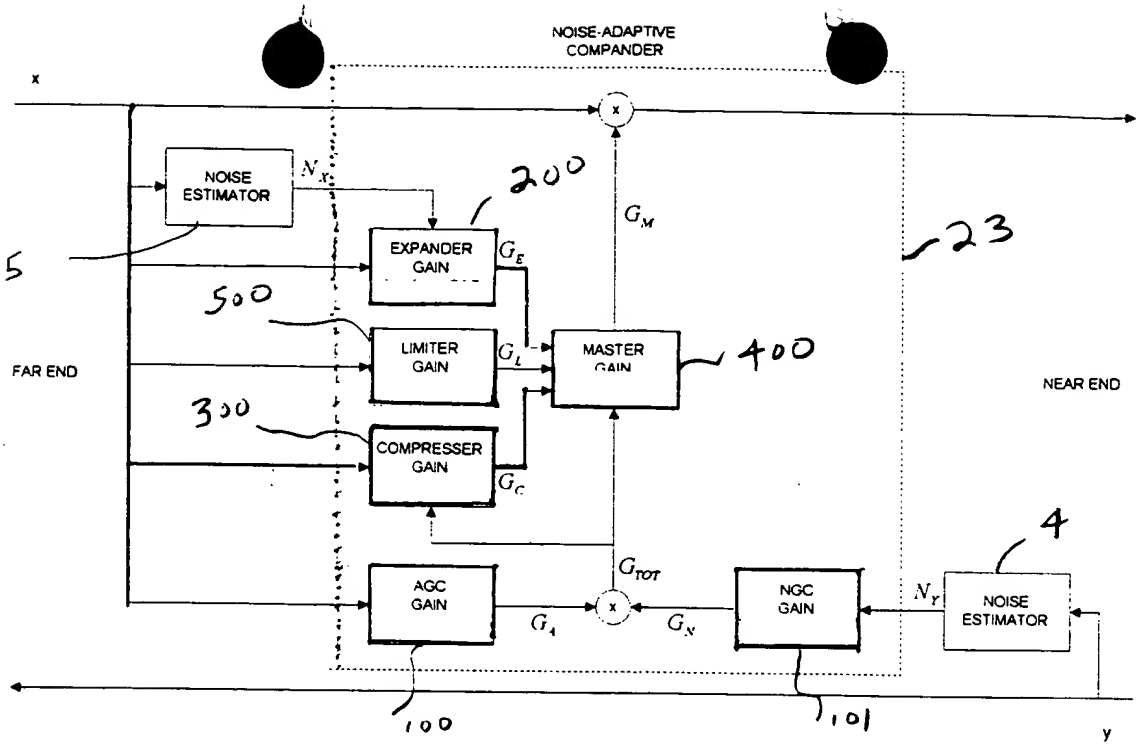


FIG. 2



0505054.0021401

FIG.3


NOISE-ADAPTIVE COMPANDER
x
NOISE ESTIMATOR
N_X
200
G_M
23
5
EXPANDER GAIN
G_E
500
LIMITER GAIN
G_L
MASTER GAIN
400
FAR END
NEAR END
300
COMPRESSER GAIN
G_C
4
G_{TOT}
AGC GAIN
G_A
G_N
NGC GAIN
N_Y
NOISE ESTIMATOR
100
101
y

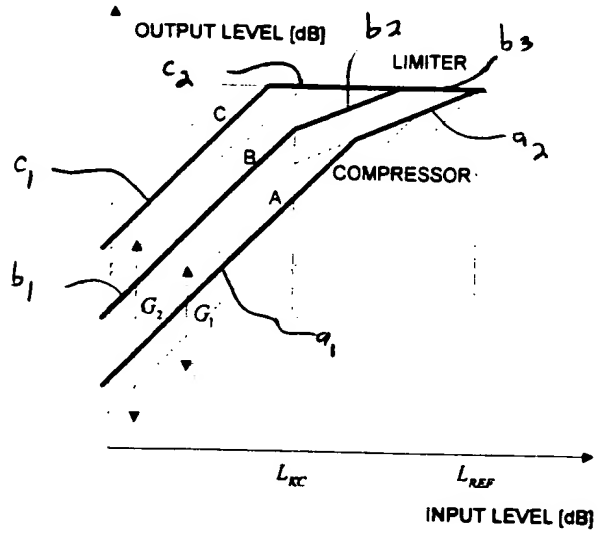

OUTPUT LEVEL [dB]
b_2
b_3
LIMITER
c_2
C
B
A
a_2
c_1
COMPRESSOR
b_1
G_2
G_1
a_1
L_{KC}
L_{REF}
INPUT LEVEL [dB]

FIG.4

FIG. 5

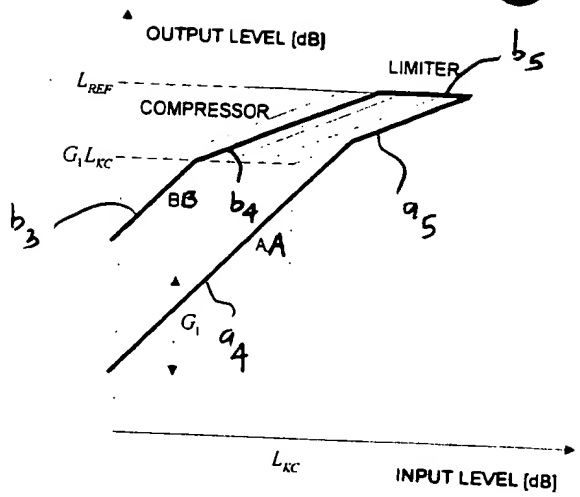


FIG. 6

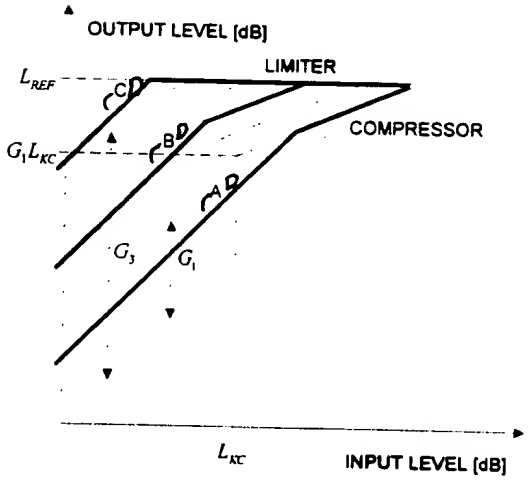


FIG. 7

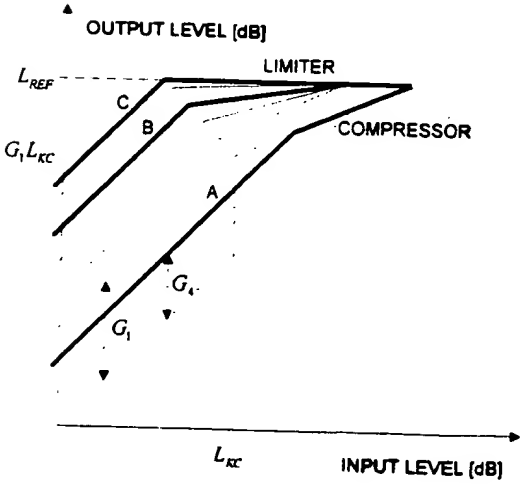


FIG. 8

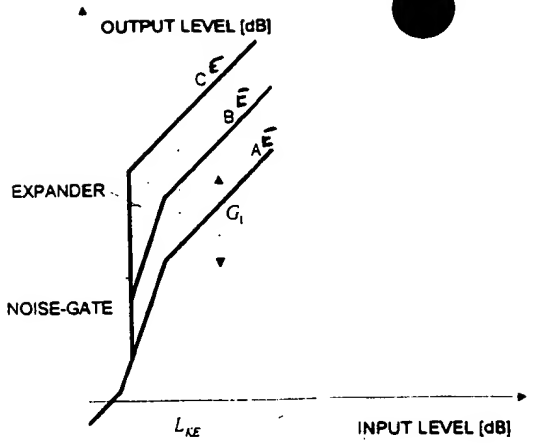


FIG. 9

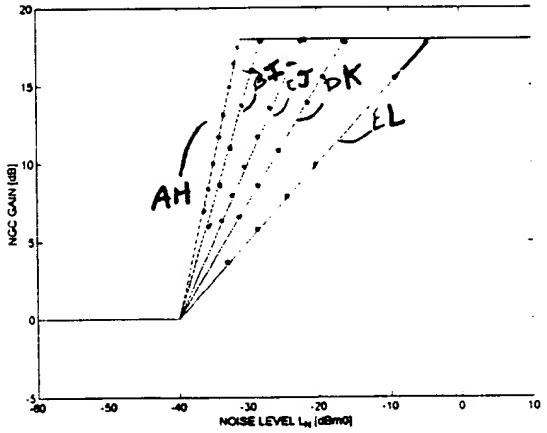
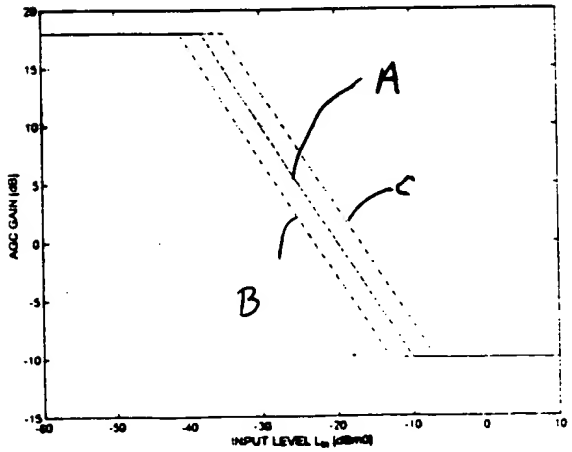


FIG. 10



0054-0524.1

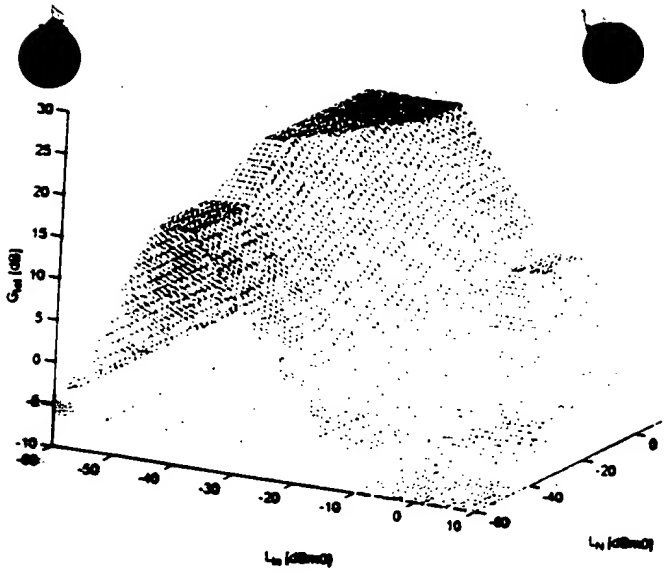
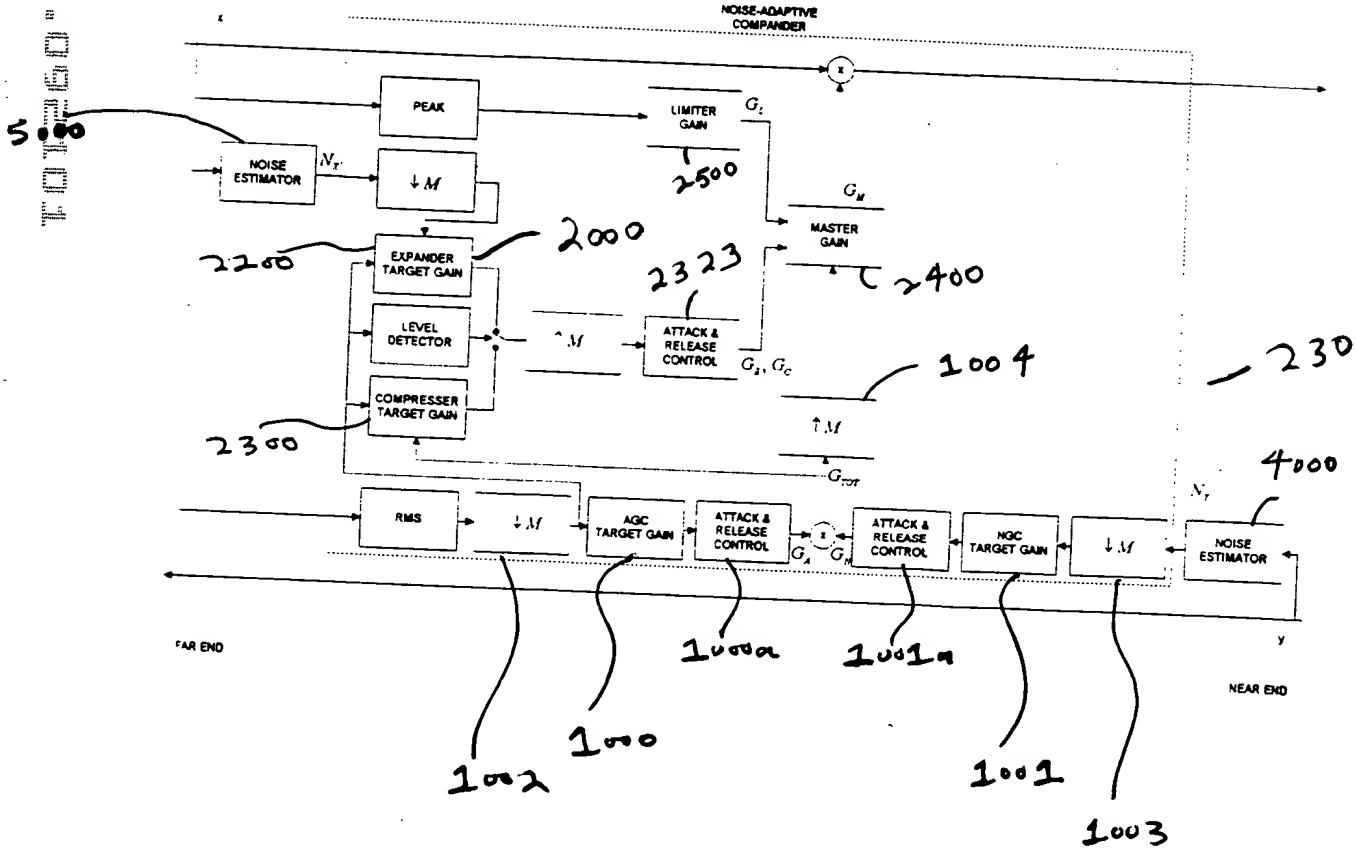

30
25
20
15
10
5
0
-5
-10
-60
-50
-40
-30
-20
-10
0
10
-60
-40
-20
0

FIG. 11

FIG. 12


NOISE-ADAPTIVE COMPANDER
PEAK
LIMITER GAIN
NOISE ESTIMATOR
MASTER GAIN
EXPANDER TARGET GAIN
LEVEL DETECTOR
ATTACK & RELEASE CONTROL
COMPRESSER TARGET GAIN
RMS
AGC TARGET GAIN
ATTACK & RELEASE CONTROL
ATTACK & RELEASE CONTROL
NGC TARGET GAIN
NOISE ESTIMATOR
FAR END
NEAR END
5000
2500
2200
2000
2323
2400
1004
230
2300
4000
1002
1000
1000a
1001a
1001
1003